

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

January 17, 2013

Via E-mail
Thomas T. McEntire
Geospace Technologies Corporation
Chief Financial Officer
7007 Pinemont Drive
Houston, Texas 77040-6601

Re: Geospace Technologies Corporation

Form 10-K for the Fiscal Year Ended September 30, 2012

Filed December 12, 2012

File No. 001-13601

Dear Mr. McEntire:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Brian Cascio

Brian Cascio Accounting Branch Chief

cc: James Y'Barbo (via E-mail)